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EXAMINER

PAN, JOSEPH T

ART UNIT PAPER NUMBER

2135

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/006,481	STONE ET AL.	
	Examiner	Art Unit	
	Joseph Pan	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36,38-54,67-70 and 73-125 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36,38-54,67-70 and 73-125 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/21/02&12/6/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response filed on December 12, 2005 has been carefully considered. Claims 1, 14, 25, 32, 38, 47, 67, 70, 74, 97, 110 have been amended. Claims 37, 55-66, 71-72 have been canceled. Claims 1-36, 38-54, 67-70, 73-125 are pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 14-19, 67-69 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claim 14:

Claim 14 recites "A data carrier for use in the method of claim 1, the data carrier having stored therein (i) data for creating a perceptible watermark, the creating data including (a) data defining an invertible algorithm for applying a perceptible watermark to material, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material and (b) data for creating at least one security key associated with the algorithm and (ii) data for creating a material identifier." The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis

of statutory subject matter under 35 U.S.C. 101. Therefore, claim 14 recites non-statutory subject matter.

Referring to claim 15-16:

Claims 15-16 depend on claim 14, therefore they are rejected with the same rationale applied against claim 14 above.

Referring to claim 17:

Claim 17 recites "A data carrier in which is stored watermark removal data including at least one key and data defining an algorithm for removing a watermark in conjunction with the key." The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Therefore, claim 17 recites non-statutory subject matter.

Referring to claim 18-19:

Claims 18-19 depend on claim 17, therefore they are rejected with the same rationale applied against claim 17 above.

Referring to claim 67:

Claim 67 recites "A signal comprising watermark removal data including a key and an invertible algorithm for configuring removal algorithm, the watermark being perceptible and reversible, the removal data identifying the invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material." The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Therefore, claim 67 recites non-statutory subject matter.

Referring to claim 68-69:

Claims 68-69 depend on claim 67, therefore they are rejected with the same rationale applied against claim 67 above.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 17-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshiura et al. (U.S. Patent No. 6,131,162).

Referring to claim 17:

Yoshiura et al. teach:

A data carrier wherein data is stored relating a watermark (see column 14, lines 55-61 of Yoshiura et al.).

Referring to claims 18-19:

Yoshiura et al. teach the claimed subject matter: using a data carrier to create the watermark (see claim 17 above). Yoshiura et al. further disclose that the data carrier is a smart card (see column 14, lines 55-61 of Yoshiura et al.).

Referring to claim 20:

Yoshiura et al. teach:

A system comprising the server, the first and the second clients (see figure 14, elements 1120, 1100, 1110 of Yoshiura et al.), the apparatus for applying a

watermark to the material (see column 9, lines 25-27 of Yoshiura et al.), and the apparatus for removing the watermark (see column 9, lines 32-34 of Yoshiura et al.).

Referring to claims 21-24:

Yoshiura et al. teach the claimed subject matter: a system of watermarking and transferring watermarked material (see claim 20 above). Yoshiura et al. further disclose that the content may contain different types of data, such as text data, drawing data, audio data, or video data (see column 11, lines 45-48 of Yoshiura et al.).

5. Claims 38-40, 46-52, 97-100, 103-111, 118-125 are rejected under 35 U.S.C. 102(e) as being anticipated by Musgrave (U.S. Patent No. 6,208,746).

Referring to claim 38:

Musgrave teaches:

A method comprising the steps of:

Applying, using a watermarking apparatus, a removable watermark to material, and applying identifying data to the material to identify the watermarked material (see column 3, lines 12-16 of Musgrave);

Registering with a transaction server conditions for the removal of the watermark (see column 4, lines 48-56 of Musgrave);

Transferring the watermarked material to a watermark removal apparatus(see column 4, lines 48-56 of Musgrave);

Identifying to the server the transferred material, and remove the perceivable watermark from the watermarked material if the predetermined conditions for removal are satisfied (see column 4, lines 48-56 of Musgrave), wherein the watermark is applied using an invertible algorithm (see column 3, lines 50-60 of Musgrave), and the perceptible watermark being applied to the material as part of a compression of the material (see column 3, lines 44-49 of Musgrave), the invertible

algorithm providing a perceivable impairment to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave)

Referring to claims 39-40:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 38 above). Musgrave further discloses that the method can be used in the electronic business such as the purchase of software, music, multimedia products, etc., and involves the conditions of sale and payments (see column 2, lines 55-58 of Musgrave).

Referring to claim 46:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 38 above). Musgrave further discloses that the method comprises a watermarking apparatus, a transaction server and a watermark removal apparatus arranged to carry out the method (see figure 1, elements 26, 16, 30 of Musgrave).

Referring to claim 47:

Musgrave teaches:

A server arranged to:

Receive and store data identifying watermarked material, data enabling removal of the watermarks from the material, and data setting predetermined conditions for the removal of watermarks (see column 3, lines 12-16; and column 5, lines 14-18 of Musgrave);

Receive identifying data identifying watermarked material from which a watermark is to be removed (see column 2, lines 52-53 of Musgrave);

Monitor whether the predetermined conditions are satisfied (see column 5, lines 14-18 of Musgrave);

If the predetermined conditions are satisfied, remove the perceivable watermark from the watermarked material (see column 5, lines 14-18 of Musgrave), wherein the watermark is applied using an invertible algorithm (see column 3, lines 50-60 of Musgrave), and the perceptible watermark being applied to the material as part of a compression of the material (see column 3, lines 44-49 of Musgrave), the invertible

algorithm providing a perceivable impairment to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave)

Referring to claim 48:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 47 above). Musgrave further discloses that the predetermined conditions are conditions of sale of the material (see column 5, lines 14-18 of Musgrave).

Referring to claims 49-50:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 47 above). Musgrave further discloses that the server interacts with the seller and the buyer of the watermarked material (see column 4, lines 48-56 of Musgrave).

Referring to claims 51-52:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 47 above). Musgrave further discloses that the conditions of sale includes paying for the material; and that the server monitors transfer of money from the buyer (see column 5, lines 14-18 of Musgrave).

Referring to claims 97, 109:

Musgrave teaches:

A method of watermarking material and transferring the watermarked material in a system, the method comprising the steps of:

Using the first processor to apply a perceptible watermark to material (see figure 1, element 26; and column 4, lines 66-67, column 5, lines 1-10 of Musgrave), in accordance with an invertible algorithm (see column 3, lines 50-60 of Musgrave), the perceptible watermark being applied to the material as part of a compression of the material (see column 3, lines 40-49 of Musgrave), the invertible algorithm providing a perceivable impairment to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave);

Using the communication network to transfer the watermarked material from the first processor to the second processor (see figure 1, elements 26, 18, 30 of Musgrave);

Transferring to the second processor watermark removal data (see figure 1, element 24 of Musgrave);

Using the second processor to remove the watermark using the removal data (see figure 1, element 30 of Musgrave).

Referring to claim 98:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 97 above). Musgrave further discloses a communication network in the system (see figure 1, element 18 of Musgrave).

Referring to claims 99-100:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 97 above). Musgrave further discloses that end-to-end electronic transactions are provided with secure authentication and protection from fraud and unauthorized use, such as by theft (see column 4, lines 44-47 of Musgrave).

Referring to claims 103, 108:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 97 above). Musgrave further discloses a system comprising the sever, and the first and the second processors (see figure 1, elements 16, 26, 30 of Musgrave).

Referring to claims 104-107:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 97 above). Musgrave further discloses the material could be video, audio/visual, audio or data (see column 3, lines 44-49 of Musgrave).

Referring to claims 110, 125:

Musgrave teaches:

A method of watermarking material and transferring the watermarked material in a system, the method comprising the steps of:

Using the first processor to create a perceptible watermark (see figure 1, element 26; and column 4, lines 66-67, column 5, lines 1-10 of Musgrave);

Using the first processor to associate the material identifier with the material and apply the perceptible watermark to the material (see figure 1, element 26; and column 4, lines 66-67, column 5, lines 1-10 of Musgrave), in accordance with an invertible algorithm (see column 3, lines 50-60 of Musgrave), the perceptible watermark being applied to the material as part of a compression of the material (see column 3, lines 40-49 of Musgrave), the invertible algorithm providing a perceivable impairment to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave);

Storing the material identifier and data (see column 4, lines 48-51 of Musgrave).

Using the communication network to transfer the watermarked material from the first processor to the second processor (see figure 1, elements 26, 18, 30 of Musgrave);

Transferring to the second processor watermark removal data (see figure 1, element 24 of Musgrave);

Using the second processor to remove the watermark using the removal data (see figure 1, element 30 of Musgrave).

Referring to claim 111:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 110 above). Musgrave further discloses the communication network in the system (see figure 1, element 18 of Musgrave).

Referring to claims 118-119:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 110 above). Musgrave further discloses that end-to-end electronic transactions are provided with secure

authentication and protection from fraud and unauthorized use, such as by theft (see column 4, lines 44-47 of Musgrave).

Referring to claim 120:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 110 above). Musgrave further discloses a system comprising a transaction server, the first and the second processors (see figure 1, elements 16, 26, 30 of Musgrave).

Referring to claims 121-124:

Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 110 above). Musgrave further discloses the material could be video, audio/visual, audio or data (see column 3, lines 44-49 of Musgrave).

6. Claims 67, 69 are rejected under 35 U.S.C. 102(e) as being anticipated by Gell (U.S. Patent No. 6,577,858).

Referring to claims 67, 69:

Gell teaches:

A signal comprising several portions of data (see column 15, line 54-60 of Gell). Gell further discloses key and algorithm (see column 13, line 47; and column 16, lines 11-12 of Gell).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-7, 9-16, 25, 29, 32-35, 70, 73-75, 77-78, 88-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al. (U.S. Patent No. 6,131,162) in view of Musgrave (U.S. Patent No. 6,208,746 B1).

Referring to claims 1, 73:

i. Yoshiura et al. teach:

A method of watermarking and transferring watermarked material in a system comprising a server, first and second clients (see figure 14, elements 1120, 1110, 1100 of Yoshiura et al.), a apparatus for applying a watermark to the material (see column 9, lines 25-27 of Yoshiura et al.) and a apparatus for removing the watermark (see column 9, lines 32-34 of Yoshiura et al.), the method comprising the steps of:

Transferring data from the server to the apparatus for creating watermark, the creating data including data defining an invertible algorithm and data for creating at least one security key associated with the algorithm (see column 6, lines 9-19 of Yoshiura et al.), and data for creating a material identifier (see column 3, lines 18-22 of Yoshiura et al.);

Using the apparatus to apply a material identifier to the material and applying a watermark to the material (see column 3, lines 13-15 of Yoshiura et al.);

Transferring the material identifier from the client to the server (see figure 14, element 1611 of Yoshiura et al.);

Transferring the watermarked material (see column 23, lines 8-14 of Yoshiura et al.);

Deriving the material identifier from the watermarked material (see column 23, lines 16-20 of Yoshiura et al.);

Transferring the material identifier to the server (see column 23, lines 16-20 of Yoshiura et al.);

Subject to predetermined conditions being satisfied, using the apparatus to remove the watermark from the material (see column 14, lines 20-25 of Yoshiura et al.).

However, Yoshiura et al. do not specifically mention applying a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material.

ii. Musgrave teaches a biometric watermark system wherein Musgrave discloses applying a perceptible watermark to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave), in accordance with an invertible algorithm (see column 3, lines 50-60 of Musgrave), the perceptible watermark being applied to the material as part of a compression of the material (see column 3, lines 40-49 of Musgrave), the invertible algorithm providing a perceivable impairment to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material, because Musgrave's teaching not only protects licensing and royalty payments

associated with information, such as software and music, but also ensures that the products are delivered to and used only by the individual authorized to receive and use the information (see column 5, lines 14-18 of Musgrave).

Referring to claim 2:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 1 above). Yoshiura et al. further disclose that the data is compressed (see column 3, lines 2-4 of Yoshiura et al.).

Referring to claims 3-4:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 1 above). Yoshiura et al. further disclose that the removal data for the watermark can be provided by the server (see column 28, lines 29-32 of Yoshiura et al.).

Referring to claims 5-7, 9:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 1 above). Yoshiura et al. further disclose using a data carrier to carry out the watermarking functionalities (see column 14, lines 55-61 of Yoshiura et al.).

Referring to claims 10-12:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 1 above). Yoshiura et al. further disclose that the system may be used in seller and buyer mode in electronic commerce wherein conditions of sale apply (see column 15, lines 26-31 of Yoshiura et al.).

Referring to claim 13:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 1 above). Yoshiura et al. further disclose using a recording medium (see column 9, lines 48-50 of Yoshiura et al.).

Referring to claim 14:

i. Yoshiura et al. teach:

A data carrier wherein data is stored for creating a watermark, so that upon receiving an encrypted content, the data carrier will embed a digital watermark to the content (see column 14, lines 55-61 of Yoshiura et al.).

However, Yoshiura et al. do not specifically mention applying a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material.

ii. Musgrave teaches a biometric watermark system wherein Musgrave discloses applying a perceptible watermark to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave), in accordance with an invertible algorithm (see column 3, lines 50-60 of Musgrave), the perceptible watermark being applied to the material as part of a compression of the material (see column 3, lines 40-49 of Musgrave), the invertible algorithm providing a perceivable impairment to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material, because Musgrave's teaching not only protects licensing and royalty payments associated with information, such as software and music, but also ensures that the products are delivered to and used only by the individual authorized to receive and use the information (see column 5, lines 14-18 of Musgrave).

Referring to claims 15-16:

Yoshiura et al. and Musgrave teach the claimed subject matter: using a data carrier to create the watermark (see claim 14 above). Yoshiura et al. further disclose that the data carrier is a smart card (see column 14, lines 55-61 of Yoshiura et al.).

Referring to claim 25:

i. Yoshiura et al. teach:

A data processing apparatus comprising:

An information material processing apparatus operable to receive signals representative of information material, and to adapt said signals to the effect of introducing a reversible modification material in accordance with a modification key (see figure 2, elements 211, 216, 220 of Yoshiura et al.);

A data generation processor operable to generate data identifying said information material (see column 3, lines 18-22 of Yoshiura et al.);

A recording apparatus operable to record said adapted signals (see column 9, lines 48-50 of Yoshiura et al.);

A data carrier used by the data processor to store watermarking data (see column 14, lines 55-61 of Yoshiura et al.).

However, Yoshiura et al. do not specifically mention applying a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material.

ii. Musgrave teaches a biometric watermark system wherein Musgrave discloses applying a perceptible watermark to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave), in accordance with an invertible algorithm (see column 3, lines 50-60 of Musgrave), the perceptible watermark being applied to the material as part of a compression of the material (see column 3, lines 40-49 of Musgrave), the invertible algorithm providing a perceivable impairment to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material, because Musgrave's teaching not only protects licensing and royalty payments associated with information, such as software and music, but also ensures that the products are delivered to and used only by the individual authorized to receive and use the information (see column 5, lines 14-18 of Musgrave).

Referring to claim 29:

Yoshiura et al. and Musgrave teach the claimed subject matter: an apparatus for watermarking (see claim 25 above). Yoshiura et al. further disclose creating a unique material identifier (see column 3, lines 18-22 of Yoshiura et al.).

Referring to claim 32:

Yoshiura et al. and Musgrave teach the claimed subject matter: an apparatus for watermarking (see claim 25 above). Yoshiura et al. further disclose a reading processor and a communication processor (see figure 10, elements 1103, 1201 of Yoshiura et al.).

Referring to claim 33:

Yoshiura et al. and Musgrave teach the claimed subject matter: an apparatus for watermarking (see claim 25 above). Yoshiura et al. further disclose the processor communicates with the database via a communication network (see figure 16, elements 1800-n, 1801-n of Yoshiura et al.).

Referring to claim 34:

Yoshiura et al. and Musgrave teach the claimed subject matter: an apparatus for watermarking (see claim 25 above). Yoshiura et al. further disclose that the communication network is the Internet (see column 3, lines 29-33 of Yoshiura et al.).

Referring to claim 35:

Yoshiura et al. and Musgrave teach the claimed subject matter: an apparatus for watermarking (see claim 25 above). Yoshiura et al. further disclose that the embodiment can be used in a seller and buyer mode wherein conditions of sale and price information apply (see column 15, lines 26-31 of Yoshiura et al.).

Referring to claims 70:

i. Yoshiura et al. teach:

a method comprising the steps of: receiving watermarked material via the first channel (see figure 2, element 213 of Yoshiura et al.), and receiving data via a second channel (see figure 2, element 211 of Yoshiura et al.).

However, Yoshiura et al. do not specifically mention applying a perceptible watermark to the material, in accordance with an invertible algorithm.

ii. Musgrave teaches a biometric watermark system wherein Musgrave discloses applying a perceptible watermark to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave), in accordance with an invertible algorithm (see column 3, lines 50-60 of Musgrave).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, because Musgrave's teaching not only protects licensing and royalty payments associated with information, such as software and music, but also ensures that the

products are delivered to and used only by the individual authorized to receive and use the information (see column 5, lines 14-18 of Musgrave).

Referring to claims 74, 91, 96:

i. Yoshiura et al. teach:

A method of watermarking and transferring watermarked material in a system comprising a server, first and second clients (see figure 14, elements 1120, 1100, 1110 of Yoshiura et al.), the method comprising the steps of:

Creating a watermark and a material identifier (see column 3, lines 18-22 of Yoshiura et al.);

Applying the watermark and the material identifier to the material (see figure 14, element 1604; and column 3, lines 13-15 of Yoshiura et al.);

Storing, in the transaction server, the material identifier and the removal data (see figure 14, element 1123 of Yoshiura et al.);

Transferring the watermarked material to the second client (see figure 14, element 1609 of Yoshiura et al.);

Deriving the material identifier associated with the material (see figure 14, element 1611 of Yoshiura et al.);

Transferring the derived identifier from the second client to the transaction server (see figure 14, element 1611 of Yoshiura et al.);

Removing the watermark subject to predetermined conditions being satisfied (see column 14, lines 20-25 of Yoshiura et al.).

However, Yoshiura et al. do not specifically mention applying a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material.

ii. Musgrave teaches a biometric watermark system wherein Musgrave discloses applying a perceptible watermark to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave), in accordance with an invertible algorithm (see column 3, lines 50-60 of Musgrave), the perceptible watermark being applied to the material as part of a compression of the material (see column 3, lines 40-

49 of Musgrave), the invertible algorithm providing a perceivable impairment to the material (see column 4, lines 66-67; and column 5, lines 1-10 of Musgrave).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Musgrave into the system of Yoshiura et al. to apply a perceptible watermark to the material, in accordance with an invertible algorithm, the perceptible watermark being applied to the material as part of a compression of the material, the invertible algorithm providing a perceivable impairment to the material, because Musgrave's teaching not only protects licensing and royalty payments associated with information, such as software and music, but also ensures that the products are delivered to and used only by the individual authorized to receive and use the information (see column 5, lines 14-18 of Musgrave).

Referring to claim 75:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method for watermarking and transferring the watermarked material (see claim 74 above). Yoshiura et al. further disclose that the watermarked material is transferred to the second client via a communication channel (see column 23, lines 11-14 of Yoshiura et al.)

Referring to claims 77-78:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 74 above). Yoshiura et al. further disclose that the system may be used in seller and buyer mode wherein conditions of sale apply (see column 15, lines 26-31 of Yoshiura et al.).

Referring to claim 88:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 74 above). Yoshiura et al. further disclose using a recording medium (see column 9, lines 48-50 of Yoshiura et al.).

Referring to claim 89:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 74 above). Yoshiura et al. further disclose downloading web pages from the web page database (see column 20, lines 34-36 of Yoshiura et al.).

Referring to claim 90:

Yoshiura et al. and Musgrave teach the claimed subject matter: a method of watermarking and transferring watermarked material (see claim 74 above). Yoshiura et al. further disclose that the first client (vendor) interacts with the transaction server (mark manager) to create the watermark (see figure 14, elements 1110, 1120 of Yoshiura et al.).

Referring to claims 92-95:

Yoshiura et al. and Musgrave teach the claimed subject matter: a system of watermarking and transferring watermarked material (see claim 74 above). Yoshiura et al. further disclose that the content may contain different types of data, such as text data, drawing data, audio data, or video data (see column 11, lines 45-48 of Yoshiura et al.).

9. Claims 41-42, 53, 101-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Musgrave (U.S. Patent No. 6,208,746) in view of Yoshiura et al. (U.S. Patent No. 6,131,162).

Referring to claims 41-42:

i. Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 38 above). However,

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Musgrave does not specifically mention linking the first client, the second client with the transaction server.

ii. Yoshiura et al. disclose a system wherein the first client (vendor) links with the transaction server (mark manager) with the communication network to register the watermark, and the second client (consumer) links with the transaction server to verify the watermark (see figure 14, elements 1110, 1120, 1100 of Yoshiura et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Yoshiura et al. into the system of Musgrave to provide a transaction server, and link the first client, the second client with the transaction server via a communication network.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Yoshiura et al. into the system of Musgrave to provide a transaction sever, and links the first client, the second client with the transaction server. The transaction sever is trusted by both the first client and the second client, therefore the transaction server is able to provide the functionality of validating the information published by the first client (vendor) when requested by the second client (consumer) (see column 7, lines 42-50 of Yohsiura et al.).

Referring to claim 53:

i. Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 47 above). However, Musgrave does not specifically mention linking to a financial institution to monitor the transfer of money.

ii. Yoshiura et al. disclose a system wherein vendors include in their web pages the image data, such as the logos of credit card companies, to allow the user to instantly select one of various payment methods (see column 4, lines 30-33 of Yoshiura et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Yoshiura et al. into the system of Musgrave to link to a financial institution to monitor the transfer of money.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Yoshiura et al. into the system of Musgrave to link to a financial institution to monitor the transfer of money, because in the electronic commerce system, providers not only need to provide user with the information on goods, but also settles accounts. Many settlement methods, including bank settlement, credit card settlements, or electronic money settlements, are used (see column 4, lines 22-29 of Yoshiura et al.).

Referring to claims 101-102:

i. Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 97 above). However, Musgrave does not specifically mention that the second processor is linked with the other processors in the system, and that the other processors are operable to access the material stored in the first processor.

ii. Yoshiura et al. disclose a system wherein all the processors are linked by a network (see e.g. figure 1, elements 100, 200, 10 of Yoshiura et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Yoshiura et al. into the system of Musgrave to link all the processors via a network.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Yoshiura et al. into the system of Musgrave to link all the processors via a network, because in the electronic commerce environment, the content distribution system comprises a plurality of provider systems each distributing digital data contents, and a plurality of purchaser systems each receiving distributed contents (see column 11, lines 51-55 of Yoshiura et al.).

10. Claims 8, 76, 79-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al. (U.S. Patent No. 6,131,162) in view of Musgrave

(U.S. Patent No. 6,208,746 B1), and further in view of Milsted et al. (U.S. Patent No. 6,345,256).

Referring to claim 8:

- i. Yoshiura et al. and Musgrave teach the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 1 above). However, Yoshiura et al. and Musgrave do not specifically mention using the metadata.
- ii. Milsted et al. disclose a system wherein the metadata is used (see column 60, lines 47 of Milsted et al.).
- iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to use metadata in association with the watermarked material.
- iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to provide the metadata associated with the watermarked material, because the electronic store is required to receive the metadata associated with the digital content from the content providers, so that the electronic store may preview the metadata, and may extract certain metadata used for promotional materials such as graphic and artist information (see column 4, lines 4-16 of Milsted et al.).

Referring to claim 76:

- i. Yoshiura et al. and Musgrave teach the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 74 above). However, Yoshiura et al. and Musgrave do not specifically mention using the metadata.
- ii. Milsted et al. disclose a system wherein the metadata is used (see column 60, lines 47 of Milsted et al.).
- iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to use metadata in association with the watermarked material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to provide the metadata associated with the watermarked material, because the electronic store is required to receive the metadata associated with the digital content from the content providers, so that the electronic store may preview the metadata, and may extract certain metadata used for promotional materials such graphic and artist information (see column 4, lines 4-16 of Milsted et al.).

Referring to claim 79:

i. Yoshiura et al. and Musgrave teach the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 74 above). However, Yoshiura et al. and Musgrave do not specifically mention the business rules.

ii. Milsted et al. disclose a system wherein the business rules are used (see column 12, lines 57 of Milsted et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to apply the business rules with the watermarked material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to apply the business rules with the watermarked material, because the business rules can specify the usage condition of the content, such as copy restriction, the wholesale price, etc. (see column 12, lines 54-58 of Milsted et al.).

Referring to claim 80:

i. Yoshiura et al. and Musgrave teach the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 74 above). However, Yoshiura et al. and Musgrave do not specifically mention keeping the statistics data relating the transaction associated with the watermarked material.

ii. Milsted et al. disclose a system wherein the statistics data are kept for the transaction (see column 8, lines 48 of Milsted et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to keep the statistics data relating to the transaction associated with the watermarked material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to keep the statistics data, because it is well known in the business world that the statistics data not only can help to analyze the business trend, but also can help to audit and trace the transactions.

Referring to claims 81-84:

i. Yoshiura et al. and Musgrave teach the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 74 above). However, Yoshiura et al. and Musgrave do not specifically mention using the file to store data.

ii. Milsted et al. disclose a system where the file is used to store data (see column 23, lines 26-28 of Milsted et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to use the file to store data.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Yoshiura et al. and Musgrave to use the file to store data, because it is well known in the computer art that it's convenient and efficient to store data in the file.

Referring to claim 85:

Yoshiura et al., Musgrave and Milsted et al. teach the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 74 above). Milsted et al. further disclose using the fingerprint to secure data from unauthorized access (see column 17, lines 32-33 of Milsted et al.).

Referring to claims 86-87:

Yoshiura et al., Musgrave and Milsted et al. teach the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 74 above). Milsted et al. further disclose transferring the data file to the recipient (see column 23, lines 26-28 of Milsted et al.).

11. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al. (U.S. Patent No. 6,131,162) in view of Musgrave (U.S. Patent No. 6,208,746 B1), and further in view of Finkestein et al. (U.S. Patent No. 5,185,733).

Referring to claim 26:

i. Yoshiura et al. and Musgrave teach the claimed subject matter: a apparatus for watermarking and transferring (see claim 25 above). However, Yoshiura et al. and Musgrave do not specifically mention that the recording medium including capacity for ancillary data.

ii. Finkestein et al. disclose a system wherein the recording medium includes capacity for ancillary data (see column 7, lines 33-36 of Finkestein et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Finkestein et al. into the system of Yoshiura et al. and Musgrave to use a recording medium with the capacity of ancillary data for the watermarked material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Finseistein et al. into the system of Yoshiura et al. and Musgrave to use the recording medium with the capacity for ancillary data, because it is well known in the recording art that the ancillary data for an area of interest used to enhance the analysis of the primary remotely sensed data (see phrase 'ancillary data' in AGI GIS dictionary)

12. Claims 27-28, 30-31, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al. (U.S. Patent No. 6,131,162) in view of Musgrave (U.S. Patent No. 6,208,746 B1), and further in view of Gell (U.S. Patent No. 6,577,858).

Referring to claims 27-28:

i. Yoshiura et al. and Musgrave teach the claimed subject matter: an apparatus for watermarking (see claim 25 above). However, Yoshiura et al. and Musgrave do not specifically mention that the data carrier is a hand insert-able smart card.

ii. Gell discloses a system wherein the system integrates all the functions of the customer accounting unit onto a hand insert-able smart card (see column 9, lines 66-67; and column 10, lines 1-4 of Gell).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gell into the system of Yoshiura et al. and Musgrave to provide a hand insert-able smart card to store watermarking data.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Gell into the system of Yoshiura et al. and Musgrave to provide a hand insert-able smart card to store watermarking data, because by storing watermarking data in a smart card, data storage becomes distributed. Also, this would provide convenience for the customer since the customer is more easily able to rely upon data which has been stored in the smart card (see column 3, lines 31-43 of Gell).

Referring to claims 30-31:

i. Yoshiura et al. and Musgrave teach the claimed subject matter: an apparatus for watermarking (see claim 25 above). However, Yoshiura et al. and Musgrave do not specifically mention that the apparatus is a camera.

ii. Gell discloses a system wherein a video camera is utilized (see column 14, line 41 of Gell).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gell into the system of Yoshiura et al. and Musgrave to utilize a camera to do watermarking.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Gell into the system of Yoshiura et al. and Musgrave to utilize a camera to do watermarking, because the camera will send video signal to be applied with a watermark (see column 14, lines 55-58 of Gell).

Referring to claim 36:

i. Yoshiura et al. and Musgrave teach the claimed subject matter: an apparatus for watermarking (see claim 25 above). However, Yoshiura et al. and Musgrave do not specifically mention utilizing the signal comprising several portions of data.

ii. Gell discloses a system wherein a signal comprising several portions of data (see column 15, line 54-60 of Gell).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gell into the system of Yoshiura et al. and Musgrave to transfer data using the signal which comprises several portions of data.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Gell into the system of Yoshiura et al. and Musgrave to utilize the signal comprising several portions of data, because it is well known in the computer art that it is efficient to transfer data in a data structure in a sequence of digital bits, transmitted in serial form via the communication channel (see column 15, lines 51-53 of Gell).

13. Claims 43-45, are rejected under 35 U.S.C. 103(a) as being unpatentable over Musgrave (U.S. Patent No. 6,208,746) in view of Gell (U.S. Patent No. 6,577,858).

Referring to claims 43-45:

i. Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 38 above). However, Musgrave does not specifically mention using a data carrier, such as a smart card, to store watermarking related data.

ii. Gell discloses a system wherein a smart card is used to integrate all the functions of the customer accounting unit.

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gell into the system of Musgrave to use a smart card, to store watermarking related data.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Gell into the system of Musgrave to use a smart card to store watermarking related data, because by storing watermarking data in a smart card, data storage becomes distributed. Also, this would provide convenience for the customer since the customer is more easily able to rely upon data which has been stored in the smart card (see column 3, lines 31-43 of Gell).

14. Claims 54, 112-117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Musgrave (U.S. Patent No. 6,208,746) in view of Milsted et al. (U.S. Patent No. 6,345,256).

Referring to claim 54:

i. Musgrave teaches the claimed subject matter: a transaction server for watermarked material (see claim 47 above). Musgrave further discloses using a key (see column 3, line 29 of Musgrave). However, Musgrave does not specifically mention using a template.

ii. Milsted et al. discloses a system wherein template is used to describe the required and optional information for building the offer, order, and license SC (see column 31, lines 55-57 of Milsted et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Musgrave to use the template.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Musgrave to use the template as a automatic configuration tool, so that the user can use the template to specify their required fields, optional fields, etc. without operator assistance (see column 60, lines 47-67; and column 61, lines 1-3 of Milsted et al.).

Referring to claims 112-113:

i. Mustrace teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 110 above). However, Musgrave does not specifically mention using the metadata.

ii. Milsted et al. disclose a system wherein the metadata is used (see column 60, lines 47 of Milsted et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Musgrave. to use metadata in association with the watermarked material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Musgrave to provide the metadata associated with the watermarked material, because the electronic store is required to receive the metadata associated with the digital content from the content providers, so that the electronic store may preview the metadata, and may extract certain metadata used for promotional materials such as graphic and artist information (see column 4, lines 4-16 of Milsted et al.).

Referring to claims 114-116:

i. Mustrace teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 110 above). However, Musgrave does not specifically mention the financial rules or business rules.

ii. Milsted et al. disclose a system wherein the financial rules (see column 62, lines 27-28 of Milsted et al.) and business rules (see column 61, lines 65-67 of Milsted et al.) are defined.

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Musgrave to define financial rules and business rules in the system.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Musgrave to define the financial rules and business rules, because the financial rules and the business rules can describe how the business operates, such as the usage condition (e.g., business, private consumer), purchase or rental of the contents, the number of playback the user is allowed to copy, and the price under this usage condition (see column 62, lines 1-28 of Milsted et al.).

Referring to claim 117:

i. Musgrave teaches the claimed subject matter: a method for watermarking and transferring watermarked material (see claim 110 above). However, Musgrave does not specifically mention keeping the statistics data relating the transaction associated with the watermarked material.

ii. Milsted et al. disclose a system wherein the statistics data are kept for the transaction (see column 8, lines 48 of Milsted et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Musgrave to keep the statistics data relating to the transaction associated with the watermarked material.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Musgrave to keep the statistics data, because it is well known in the business world that the statistics data not only can help to analyze the business trend, but also can help to audit and trace the transactions.

15. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gell (U.S. Patent No. 6,577,858) in view of Milsted et al. (U.S. Patent No. 6,345,256).

Referring to claim 68:

i. Gell teaches the claimed subject matter: a signal comprising several portions of data (see claim 67 above). However, Gell does not specifically mention using a template.

ii. Milsted et al. discloses a system wherein template is used to describe the required and optional information for building the offer, order, and license SC (see column 31, lines 55-57 of Milsted et al.).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Milsted et al. into the system of Gell to include the template.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Milsted et al. into the system of Gell to use the template as a automatic configuration tool, so that the user can use the template to specify their required fields, optional fields, etc. without operator assistance (see column 60, lines 47-67; and column 61, lines 1-3 of Milsted et al.).

Response to Arguments

16. Applicant's arguments filed on December 12, 2005 have been fully considered but they are not persuasive.

Applicant argues that:

"However, there is no disclosure in Musgrave of the watermark being perceptible when applied to the material and no indication that this is supplied with an

invertible algorithm. Furthermore, there is no disclosure of the watermark being applied in combination with providing a compression encoding process which has an effect of impairing the material."

Examiner maintains that:

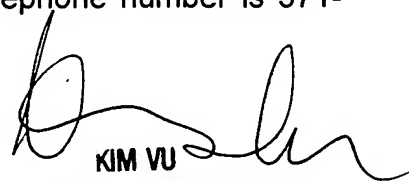
Musgrave discloses that the watermark is perceptible when applied to the material, because any unauthorized user receiving the biometrically encoded bitstream without the accurate extraction of the biometric watermark receives a scrambled bitstream, as the biometric watermark acts as noise within the bitstream (see column 5, lines 1-9 of Musgrave). Musgrave further discloses that the watermark is supplied with an invertible algorithm (see column 3, lines 50-60 of Musgrave). Furthermore, Musgrave discloses that the watermark is applied in combination with providing a compression process (see column 3, lines 44-49 of Musgrave), which has an effect of impairing the material (see column 5, lines 1-9 of Musgrave).

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Pan whose telephone number is 571-272-5987.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.


KIM VU
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